Talking Points on VSD Screening Analysis

The VSD screening analysis published in Pediatrics in November 2003 found no consistent statistically significant associations between exposure to vaccines that contained thimerosal as a preservative and a wide range of neurodevelopmental problems, including autism and, attention deficit disorder (ADD).

SafeMinds and the book "Evidence of Harm" by David Kirby have highlighted 5 "generations" of analyses in the VSD screening analysis. They have implied that the initial analysis which found increased relative risks for certain categories of exposure for autism, ADD, and sleep disorders was correct and subsequent iterations of analyses were undertaken in order to minimize or conceal a true relationship between thimerosal and autism.

There are three major reasons why the final published report differed from the initial November-December 1999 analysis.

First, in early analyses there were errors both in the dataset and in the analysis. The dataset used in the initial analyses contained a number of errors in thimerosal content of vaccines. These errors were identified and corrected. Managed Care Organizations (MCOs) that did not have outpatient data available were initially included by mistake; this error was subsequently corrected, as were various errors in programming, including double counting of cases.

Second, there was little variation in thimerosal content of vaccines used in the participating VSD managed care organizations. Differences in thimerosal exposure among children in the study were mostly due to the fact that some children were vaccinated "on time" and others were not, rather than due to differences in receipt of thimerosal-free vs thimerosal-containing vaccines. Managed care organizations make every effort to vaccinate the children for whom they provide care on time with recommended childhood vaccines. Children who do not receive recommended childhood vaccines are likely not receiving the same level or intensity of medical care within the managed care organization than children who are vaccinated – and if a child is not being seen in the MCO clinics for vaccinations, the child is also unlikely to have autism or other diagnoses entered into managed care databases. This variation in the utilization of managed care services was a difficult issue to address; however researchers were able to do so by including statistical adjustments for health care utilization in the final published analyses.

Third, the final paper includes additional years of follow up, with many more children included who had been diagnosed with autism. Critics have suggested that follow up was extended in order to "dilute" the study with addition of younger children who are less likely to be diagnosed with autism. This is not true. The published analyses account for age by comparing children in a given age group with one level of thimerosal exposure with children in that same age group with a different level of thimerosal exposure. Because this statistical method was used, the addition of younger children does not dilute

the study's ability to identify an association if one existed, and in fact the study is substantially strengthened by continuing follow up into older age groups where the diagnosis of autism is more likely to be made.

The allegation that subsequent iterations of the VSD analysis were undertaken in order to minimize or conceal a true relationship between thimerosal and autism is false. The integrity of CDC's vaccine safety research and its reputation for excellence are among the most valued assets of our agency. This commitment not only stems from our scientific and medical dedication, it is also personal -- for most of us who work at CDC are also parents and grandparents. And as such, we too, have high levels of personal interest and concern in the health and safety of children, families, and communities.